



STATE OF MARYLAND

DHMH

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August 28, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:33 Reporting for the week ending 08/22/09 (MMWR Week #33)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

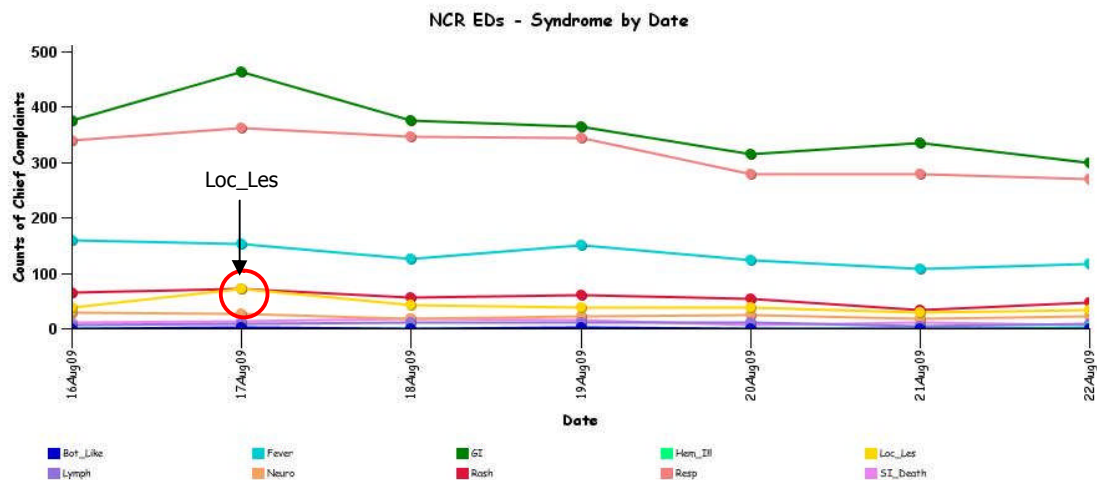
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

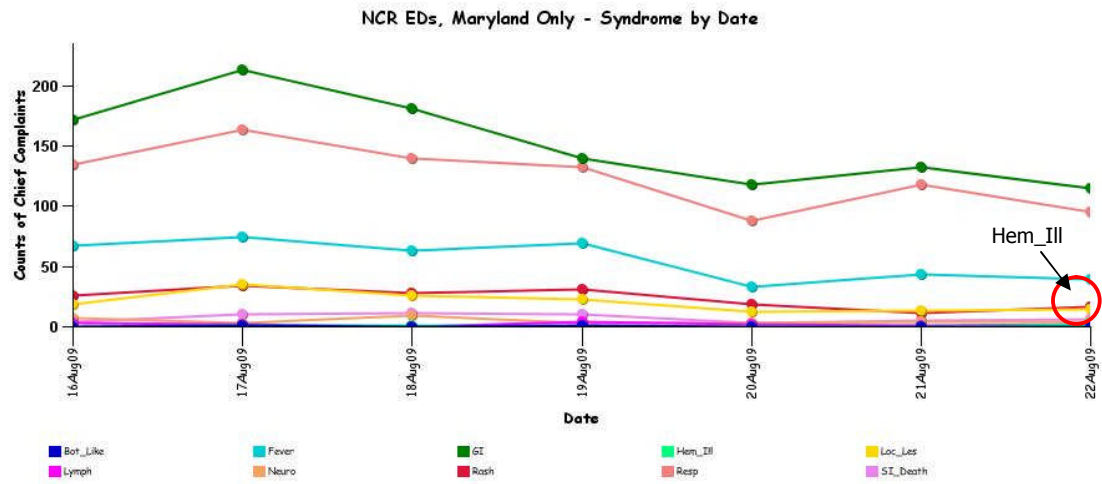
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

****Data for graph of NCR EDs is not complete due to technical issues.**

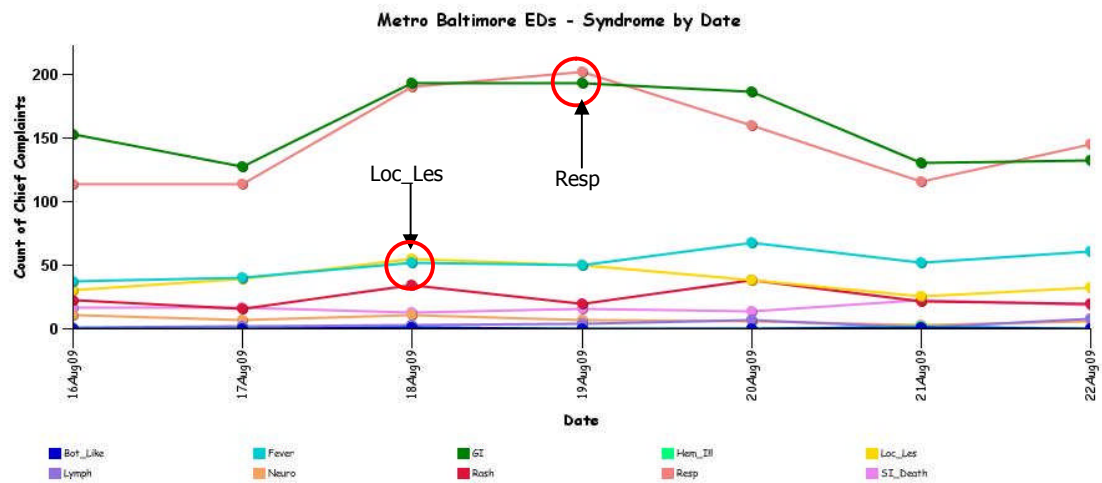


* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.

****Data for graph of NCR EDs, Maryland Only is not complete due to technical issues.**

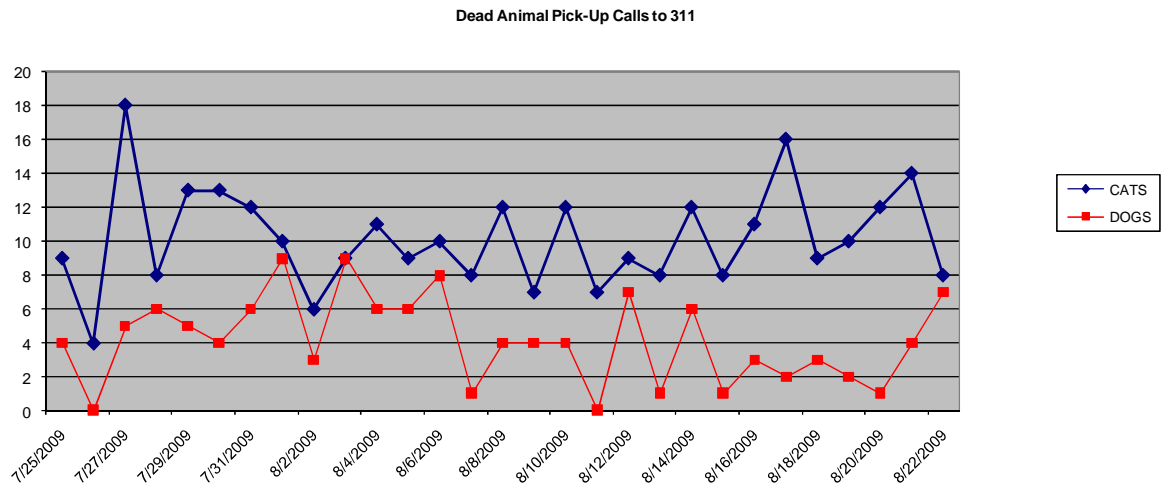


* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

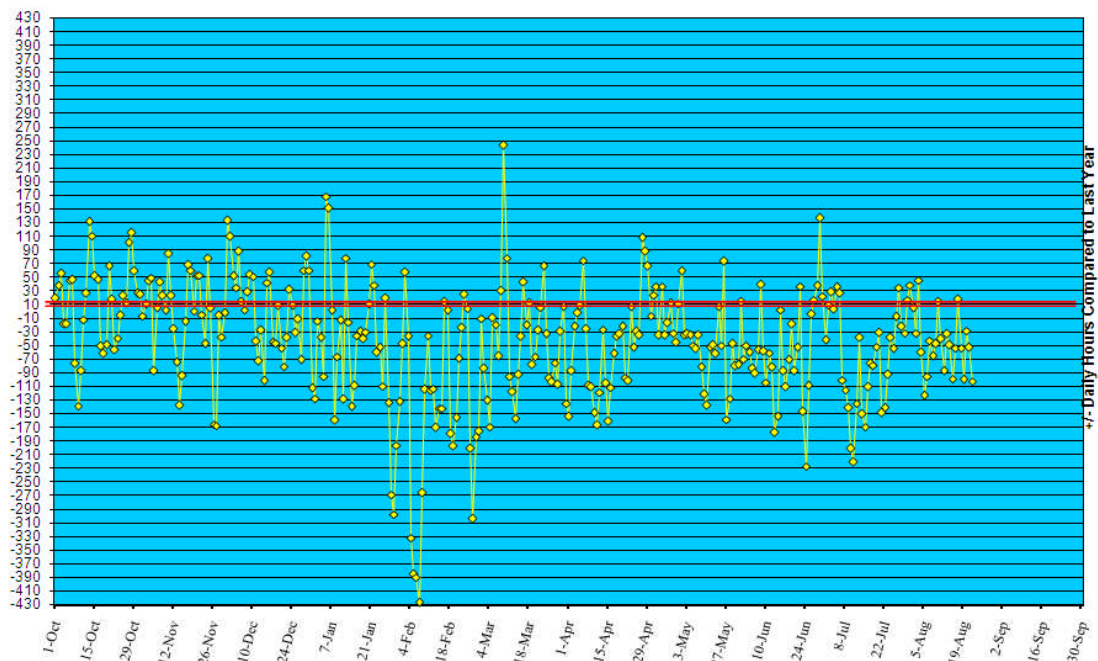
BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '08 to August 22, '09



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Aug 16- Aug 22, 2009):	14	0
Prior week (Aug 09- Aug 15, 2009):	17	0
Week#33, 2008 (Aug 10 - Aug 16, 2008):	07	0

3 outbreaks were reported to DHMH during MMWR Week 33 (August 16 - 22, 2009):

2 Respiratory illness outbreaks

1 outbreak of INFLUENZA associated with a Migrant Camp

1 outbreak of PERTUSSIS associated with a Private Home

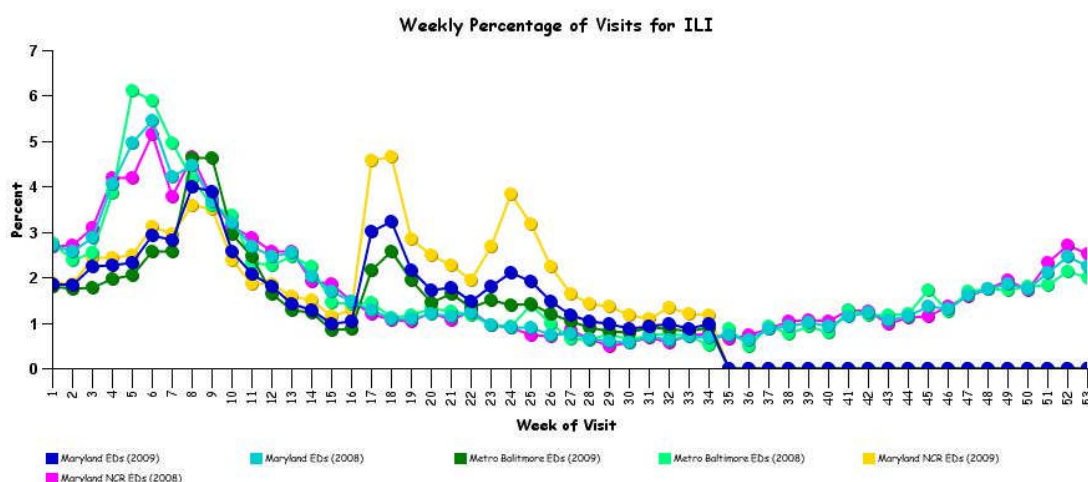
1 Foodborne illness outbreak

1 outbreak of CIGUATERA POISONING associated with a Private Home

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 33 is SPORADIC.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



*Graph shows proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

PANDEMIC INFLUENZA UPDATE:

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

****More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**
[http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

AVIAN INFLUENZA-RELATED REPORTS:

WHO update: As of August 11, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 438, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1), ANIMAL HEALTH, CHILE: On 21 Aug 2009, Chile detected the H1N1 swine flu virus in turkeys, authorities said on Thursday, the first time the virus has been found outside humans or pigs. Chile's farming and livestock agency SAG said the flu outbreak had been controlled at the two farms 120 km [75 mi] west of the capita Santiago. "We call on the public to consume turkey products with confidence," a SAG statement said. It added that laboratory results ruled out the presence of H5N1 or bird flu virus. The Geneva-based World Health Organization declared H1N1 a full pandemic in June [2009] and the virus has now spread to some 180 countries, causing at least 1462 laboratory-confirmed deaths. The WHO says the pandemic is unstoppable. The H1N1 swine flu virus was first seen in March [2009] in Mexico and California. Experts say at least 1 million people have been infected in the United States alone. Genetic tests show the virus appears to have originated in pigs but it is now spreading from human to human. The head of the WHO, Margaret Chan, said this week that the world must remain on guard against the H1N1 flu, which has been mild so far but could become more serious as the northern hemisphere heads into winter.

INFLUENZA PANDEMIC (H1N1), ANIMAL HEALTH, AUSTRALIA: 20 Aug 2009, A 2nd Australian piggery was placed in quarantine due to swine flu on Wednesday [19 Aug 2009] as the number of human deaths from the virus reached 121. Authorities ordered a biosecurity lockdown at the piggery in Victoria state amid concerns the virus could mutate and return to humans in a more deadly form. Another piggery in New South Wales state has been quarantined since late July [2009], although the state government said most of the animals had recovered from the disease. Victoria Agriculture Minister Joe Helper said tests confirmed the presence of influenza at the piggery after its owners reported earlier this week that the animals were not eating. It is important to stress that this is not a human health issue and that national and international food authorities continue to advise that pork and pork products are safe to eat,' he said. Media reports said the pigs were believed to have contracted the virus from workers at the property who were suffering the human form of the disease. Health experts fear swine flu in humans, which is easily spread but has a relatively low fatality rate, could mutate in other animals and emerge in a more virulent form. Swine flu has hit 32 224 people in Australia, with 460 people hospitalized, 100 of them in intensive care. Human trials are underway for a vaccine, with mass immunization of the entire population scheduled to begin in October [2009].

INFLUENZA PANDEMIC (H1N1), TAMIFLU USE POLICY: 17 Aug 2009, The government rejected advice from its expert advisers on swine flu [influenza pandemic (H1N1) 2009 virus], who said there was no need for the widespread use of Tamiflu and suggested that the public should simply be told to take paracetamol. An independent panel set up by the Department of Health warned ministers that plans to make the stockpiled drug widely available could do more harm than good, by helping the flu virus to develop resistance to the drug. But ministers pressed ahead with a policy of mass prescription, fearing the public would not tolerate being told that the millions of doses of Tamiflu held by the state could not be used during a pandemic, one of the committee members has told the Guardian [newspaper]. "It was felt ... it would simply be unacceptable to the UK population to tell them we had a huge stockpile of drugs but they were not going to be made available," Professor Robert Dingwall, a member of the Committee on Ethical Aspects of Pandemic Influenza, said. Today [16 Aug 2009] one of the country's foremost flu experts called for the national helpline to be shut down to stop hundreds of thousands of doses of Tamiflu going out in an unregulated way, which could render it useless when a more dominant strain returns in the autumn. As it became clear that the current outbreak only had mild symptoms, the committee recommended that antivirals should only be given to those in high risk categories, like pregnant women or people with existing respiratory illnesses. It suggested the government explain to people that they would not be given medicine they did not need and should use off-the-shelf flu treatments. "There were discussions within the Health Protection Authority and the Department of Health, once it became clear that swine flu was a relatively mild infection, about whether to reserve antivirals for high-risk groups and to advise the general population to treat themselves with paracetamol or ibuprofen," said Dingwall, director of the Institute for Science and Society at Nottingham University.

"Some people wanted to take a long-term view of the risk of resistance developing and to seek to preserve the effectiveness of antivirals for the next pandemic, which may be more severe. Last month [July 2009], the government launched the national pandemic flu service, which authorised more than 511 000 courses of Tamiflu and Relenza treatment during its 1st fortnight in operation.

Resources:

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmm.maryland.gov/swineflu/>

NATIONAL DISEASE REPORTS

No new disease outbreaks related to CDC Critical Biological Agents were reported for MWWR week 33.

INTERNATIONAL DISEASE REPORTS

EBOLA HEMORRHAGIC FEVER (UGANDA): 21 Aug 2009, Medical workers in Mbale Hospital have been put on high alert following the admission of a patient suspected to have Ebola hemorrhagic fever. The suspect was referred to Mbale from Tororo Hospital at 11:00 am on Tuesday [18 Aug 2009] after his condition deteriorated. A senior nursing officer in Mbale Hospital said precautionary measures had been taken. The patient has been isolated and access to his room restricted. The patient has been bleeding from the nose, mouth and ears since admission. He also has blood in his stool and urine. "We took laboratory tests and prescribed supportive treatment for hemorrhagic fever," said the medic yesterday. The medical staff became concerned when the bleeding persisted, although they put the patient on 5 litres of intravenous fluids, blood transfusion and intensive treatment. They stated that more blood samples were taken yesterday from the patient and sent to the Uganda Virus Research Institute in Entebbe for testing. David Obol, the chief administrator, said the hospital had provided medical workers [caring for] the patient with protective gear and disinfectants while awaiting the results. Yesterday [18 Aug 2009], the patient was in a pathetic state. He lay on bed groaning, blood flowing from his mouth and nose. He was unable to talk. "Though the patient has all symptoms of Ebola hemorrhagic fever, we cannot make conclusive statements until we receive his results from the Virus Institute," said the medic. The patient's father narrated that his son was 1st treated for malaria in Sudan where he had been working as a casual laborer on a construction site. 'He 1st developed high fever and sweated profusely. He was put on malaria treatment. When he failed to respond to the treatment, friends contacted us and we brought him back home for additional treatment at Tororo Hospital.' He said they were immediately referred to Mbale Hospital. Dr. Sam Zaramba of the Ministry of Health said last night [18 Aug 2009] that he had not yet received any report of the admission. Ebolavirus [belongs to a family of viruses, the _Filoviridae_] a group of viruses that cause a hemorrhagic fever for which there is no cure. The various symptoms, that can appear suddenly, include diarrhea, fever, fatigue, general pain and severe bleeding. The cause of death is usually hypovolemic shock (inadequate blood) or organ failure. The virus spreads through contact with bodily fluids and tissue of infected people. Ebola hemorrhagic fever has a high death rate, claiming between 50 and 90 percent of victims. The only way to stop or contain it is through prevention, rapid diagnosis and isolation of suspected cases. The last outbreak of Ebola hemorrhagic fever was reported in the western district of Bundibugyo [Uganda] in December 2007. The disease killed 16 people out of the 51 cases that were reported. In an ebolavirus outbreak in Gulu 2000, 428 people became infected, 173 of whom died. (Viral Hemorrhagic is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, RHINOCERUS (INDIA): 20 Aug 2009, Jaldapara Wildlife Sanctuary is gearing up for a possible anthrax attack as a rhino calf is suspected to have died of the disease yesterday. The body of the 4-year-old female rhino had been found in the Moiradanga beat, 50km from here. The sanctuary is famous for its one-horned rhino, the number of which had in recent years risen considerably. The last census had revealed the presence of 128 rhinos against the 14 found in 1985. Samples of the tissues have been sent to the State Forensic Science Laboratory in Calcutta's Belgachia and Forensic Laboratory in Guwahati for tests. Some forest employees had seen the baby rhino shivering, one of the symptoms of anthrax, before it died. The reports of the tests from the 2 laboratories are expected to reach Jaldapara within a week. "We suspect that the sub-adult female rhino died of anthrax and to determine the actual cause of death we have sent samples to both the laboratories," said S.B. Patel, the chief conservator of forest (wild life, north). The worried Jaldapara authorities have written to Calcutta to send anthrax vaccines as well as tranquilizers for big animals like elephants and rhinos. There is also an acute shortage of needle(s), feather (to balance the darts) and barrel essential for carrying out tranquilization. "We need tranquilizers, too, because if the samples test positive for anthrax, we will go for mass vaccination. For that we will have to tranquillise the animals. We will start with the vaccination of captive animals in Jaldapara especially the elephants. The equipment necessary for tranquillization can be easily collected from other divisions but there is a shortage of the tranquilliser itself in the region," said Patel. In the absence of tranquillisers, an injured makna (male elephant without tusk) has been roaming the Harindanga beat for the past few days. Proloy Mandal, the vet of Jaldapara, said it was difficult to tranquillize big animals in the monsoon. "Big animals like elephants will not be able to get up by themselves if they fall in a swamp or marshy land." (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE CUBANA, SPROUTS (CANADA): 19 Aug 2009, Onion and alfalfa sprouts distributed by a Brantford, Ontario food company are suspected as carriers of a rare subtype of salmonella that has sickened 12 people in Ontario and Alberta since April 2009. The Canadian Food Inspection Agency [CFIA] on 9 Aug 2009 put out a

health hazard alert for Sprouts Alive and Sunsprout brand onion sprouts and mixed onion/alfalfa sprouts, distributed by Sunsprout Natural Foods. CFIA said on 9 Aug 2009 that there were no confirmed illnesses directly tied to the consumption of the affected products. However, Sunsprout has announced a voluntary recall of the 2 affected products, with best-before codes up to and including 27 Aug 2009. The products were distributed in Ontario and the Maritimes, and may have been sold in Quebec, CFIA said. "A few" of the people who became ill reported having eaten sprouts, Ontario's health ministry said in a release Friday [14 Aug 2009]. The ministry added that it's working with local and federal health authorities to try to find out the source of the illness in the remaining cases. The rare subtype in all these cases is *Salmonella* [enterica serotype] Cubana, which the ministry said is typically confirmed in just a couple of reported cases in Ontario each year. According to the federal Public Health Agency [PHAC] last Thursday [13 Aug 2009], there have so far been 7 cases of Cubana in Ontario and 5 in Alberta in which the date of the illness' onset is known. Of those, the illnesses began between 15 Apr 2009 and 26 Jul 2009. Provincial and federal health authorities plan to monitor for additional cases, PHAC said, noting that the number of cases associated with this relatively small outbreak may increase as the investigation continues. (Food Safety Threats are listed in Category B in the CDC list of Critical Biological Agents)
*Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (KAZAKHSTAN): 18 Aug 2009, The Kazakhstan Ministry of Health has denied reports emanating from Russian media sources concerning an emergency situation in Kazakhstan due to an outbreak of Crimean-Congo hemorrhagic fever (CCHF). The Russian press has reported that an emergency situation has been declared following an outbreak of CCHF in Kazakhstan. The Ministry of Health has denied that any emergency situations exists, but have confirmed that there are 2 new CCHF cases in South Kazakhstan. Control measures to contain this infection are being implemented in the region. A resident of Syrdarya village has been admitted to the Shardarinskiy Regional infectious diseases Hospital. A 16-year-old girl from Jideli village is suspected having contracted CCHF. In total 22 people have contracted CCHF infection in Kazakhstan, including 8 cases with fatal outcome. The Ministry of Health stated that facilities are in place to deal with any further cases. An official from the Ministry of Health announced that anti-tick disinfection measures were in progress in affected areas. Once these have been completed the focus of the outbreak will have been contained. Until this has been completed further cases may still occur. A total of 224 million tenge (1 000 000 Kazakhstan tenge = 6633.50 US dollars) have been released for CCHF prevention, including 196 millions from the state reserves. 21 percent of cattle, which are the main carriers of ticks, have received anti-tick treatment in South Kazakhstan and the Kyzylordinskiy Oblast. In total 87 people are currently in quarantine. The deputy chair of the public health committee of the ministry of Health has stated that more than 300 people went under medical observation because of contacts with CCHF cases. All of them are receiving the necessary care. He also affirmed, that despite the high interest of the Russian media in this issue, there is no reason for panic, and outbreaks such as occurred last July [2008] will not happen. (Viral Hemorrhagic is listed in Category A on the CDC list of Critical Biological Agents)
*Non-suspect case

ANTHRAX, HUMAN, BOVINE (TAJIKISTA): 17 Aug 2009, According to the Veterinary Service of the Ministry of Agriculture of Tajikistan, an outbreak was registered in the village Maydapata in Farkhor district of Khatlon oblast (200 km [124 mi] south of Dushanbe). Of the hospitalized cases 4 have been confirmed as [cutaneous] anthrax. Up to 150 000 people live in the Farkhor district, according to unofficial data. "Currently a team of veterinarians is working in the area," the Veterinary Service announced. Anthrax was diagnosed in 30 cows, out of the 300 under observation. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

Use of Influenza A (H1N1) 2009 Monovalent Vaccine Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009. MMWR August 21, 2009 / 58(Early Release);1-8. This report provides recommendations by CDC's Advisory Committee on Immunization Practices (ACIP) regarding the use of vaccine against infection with novel influenza A (H1N1) virus. Information on vaccination for seasonal influenza has been published previously (CDC. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices [ACIP], 2009. MMWR 2009;58[No. RR-8]).

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr58e0821a1.htm?s_cid=rr58e0821a1_e

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly

notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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